IN THE CLAIMS

1-26. (previously cancelled)

27. (original) A nucleotide sequ nce encoding an effective portion of a class A starch branching enzyme (SBE) obtainable from potato plants.

28. (previously amended) The nucleotide sequence according to claim 27, encoding a polypeptide comprising substantially the amino acid sequence of residues 49 to 882 of the sequence shown in Figure 5.

29. (previously amended) The nucleotide sequence according to claim 27 or 28, comprising substantially the sequence of nucleotides 289 to 2790 of the sequence shown in Figure 5, or a functional equivalent thereof.

30. (previously amended) The nucleotide sequence according to claim 29, further comprising the sequence of nucleotides 145 to 288 of the sequence shown in Figure 5, or a functional equivalent thereof.

31. (previously amended) The nucleotide sequence according to claim 27, comprising the sequence of nucleotides 228 to 2855 of the sequence labelled psbe2con.seq in Figure 8, or a functional equivalent thereof.

32. (previously amended) The nucleotide sequence according to claim 27, comprising the sequence of nucleotides 57 to 2564 of the sequence labelled as psbe2con.seq in Figure 12, or a functional equivalent thereof.

33. (previously amended) The nucleotide sequence according to any one of claims 27 to 32, comprising an in-frame ATG start codon, and optionally including a 5' and/or a 3' untranslated region.

34. (previously amended) The nucleotide sequence according to claim 27, comprising the sequence of nucleotides 45 to 3200 of the sequence labelled as psbe2con.seq in Figure 8, or a functional equivalent thereof.

35. (previously amended) A nucleic acid construct comprising a sequence in accordance claim 27.

36. (original) An expression vector comprising a nucleic acid construct according to claim 35.

37. (previously amended) A host cell into which has been introduced a sequence in accordance with claim 27.

38-41. (cancelled subject to applicants' right to refile this non-elected subject matter in a divisional application)

42. (previously amended) A method of altering the characteristics of a plant, comprising introducing into the plant a portion of a nucleotide sequence in accordance with

Received from < 19087073706 > at 5/28/03 2:06:11 PM [Eastern Daylight Time]

claim 27, operably linked to a suitable promoter active in the plant, so as to affect the expression of a gen present in the plant.

43. (previously amended) The m thod according to claim 42, wherein the nucleotide sequence is operably linked in the anti-sense orientation to a suitable promoter active in the plant.

44. (previously amended) The method according to claim 42, wherein the introduced sequence comprises at least one region selected from the group consisting of a 5' untranslated region, a 3' untranslated region, and a coding region of the potato SBE class A starch branching enzyme operably linked in the sense orientation to a promoter active in the plant, so as to cause sense suppression of an enzyme naturally expressed in the plant.

45. (previously amended) The method according to claim 42, further comprising introducing into the plant one or more further sequences.

46. (previously amended) The method according to claim 45, wherein one or more of the further sequences are operably linked in the anti-sense orientation to a suitable promoter active in the plant.

47. (previously amended) The method according to claim 45, wherein the further sequence comprises a portion of a class B SBE nucleotide sequence.

48. (previously amended) The method according claim 42 or 47, effective in altering the starch composition of a plant.

49. (previously amended) A plant or plant cell having characteristics altered by the method of claim 42 or 47, or the progeny of such a plant, or part of such a plant.

50. (previously amended) The plant according to claim 49, selected from one of the following: potato, pea, tomato, maize, wheat, rice, barley, sweet potato, and cassava.

51. (previously amended) A tuber or other storage organ from a plant according to claim 49.

52. (previously cancelled)

53. (previously amended) The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has an elevated viscosity onset temperature as judged by viscoamylograph conducted according to the protocol defined in claim 7, compared to starch extracted from a similar, but unaltered, plant.

54. (previously amended) The plant according to claim 53, wherein the viscosity onset temperature is elevated by an amount in the range of 10 to 25°C.

55. (previously amended) The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has a decreased peak

Received from < 19087073706 > at 5/28/03 2:06:11 PM [Eastern Daylight Time]

viscosity as judged by viscoamylograph conducted according to the protocol d fined in claim 7, compared to starch extracted from a similar, but unaltered, plant.

56. (previously amend d) The plant according to claim 55, wherein the peak viscosity is decreased by an amount in the range of 240 to 700 SNUs.

57. (previously amended) The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has an increased pasting viscosity as judged by viscoamylograph conducted according to the protocol defined in claim 7, compared to starch extracted from a similar, but unaltered, plant.

58. (previously amended) The plant according to claim 57, wherein the pasting viscosity is increased by an amount in the range of 37 to 260 SNUs.

59. (previously amended) The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has an increased set-back viscosity as judged by viscoamylograph conducted according to the protocol defined in claim 7, compared to starch extracted from a similar, but unaltered, plant.

60. (previously amended) The plant according to claim 59, wherein the set-back viscosity is increased by an amount in the range of 224 to 313 SNUs.

61. (previously amended) The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has a decreased set-back viscosity as judged by viscoamylograph conducted according to the protocol defined in claim 7, compared to starch extracted from a similar, but unaltered, plant.

62. (previously amended) The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has an elevated apparent amylose content as judged by iodometric assay according to the method of Morrison & Laignelet, compared to starch extracted from a similar, but unaltered, plant.

63. (previously amended) The plant according to claim 49, containing starch which, as extracted from the plant, has a phosphorus content in excess of 200mg/100grams dry weight starch.

64-66. (previously cancelled)

67. (original) A potato plant or part thereof which, in its wild type possesses an effective SBE A gene, but which plant has been altered such that there is no effective expression of an SBE A polypeptide within the cells of at least part of the plant.

68. (previously amended) A potato plant or part thereof which, in its wild type possesses an effective SBE A gene, but which plant has been altered such that there is no effective expression of an SBE A polypeptide within the cells of at least part of the plant, wherein the alteration is eff cted by a method according to claim 42 or 47.

Received from < 19087073706 > at 5/28/03 2:06:11 PM [Eastern Daylight Time]

69-72. (cancelled subject to applicants' right to refile this non-el cted subject matter in a divisional application)

73. (previously amended) The nucleotide sequence of claim 33, further comprising a 5' and/or a 3' untranslated region.

74. (cancelled subject to applicants' right to refile this non-elected subject matter in a divisional application)

Received from < 19087073706 > at 5/28/03 2:06:11 PM [Eastern Daylight Time]

STATUS OF THE CLAIMS

Claims 27-51, 53-63, and 67-74 were pending.

Claims 27-51, 53-63, and 67-74 1-26, 52, 64-66 have been restricted under 35 U.S.C. § 121.

Claims 38-41, 69-72 and 74 are cancelled, subject to Applicants' right to refile the nonelected subject matter in a divisional application.

Claims 27-37, 42-51, 53-63, 67-68 and 73 are presented for reconsideration.

Received from < 19087073706 > at 5/28/03 2:06:11 PM [Eastern Daylight Time]